

IN THE CLAIMS

1. - 9. (Canceled).

10. (Currently amended) An agent ~~for regenerating damaged tissue, wherein the regenerating comprises the induction of~~ inducing terminally differentiated cells to divide, the agent comprising a fusion protein that further comprises,

(a) the viral protein VP22; and

(b) a protein capable of inducing ~~the proliferation of terminally differentiated cells, and~~

wherein the protein capable is a viral transformation protein, and wherein the fusion protein induces terminally differentiated cells to enter the cell cycle.-

11. (Previously presented) The agent of claim ~~9-10~~ wherein the protein capable of inducing the proliferation of terminally differentiated cells is SV-40 T-antigen.

12. (Previously presented) The agent of claim ~~9-10~~ wherein the protein capable of inducing the proliferation of terminally differentiated cells is a viral cyclin.

13. (Previously presented) The agent of claim 11 wherein the viral cyclin is the K or V cyclin of Herpes Simplex Virus.

14. (New) An agent for inducing terminally differentiated cells to divide, the agent comprising a fusion protein that further comprises,

(a) the viral protein VP22; and

(b) the SV-40 large T-antigen.

15. (New) The agent of claim 14, wherein the VP22 is connected by its carboxyl terminus, to the amino terminus of the SV-40 large T-antigen.

16. (New) The agent of claim 15, wherein the carboxyl terminus of the SV-40 large T-antigen comprises a hexapeptide of six histidines.

17. (New) The agent of claim 14, prepared by a method comprising the steps:

(a) preparing an expression vector comprising a promoter region operably coupled to a polynucleotide sequence encoding the agent of claim 14;

(b) contacting the vector with cells culture medium under conditions that effectively permit synthesis of the agent of claim 14, and

(c) isolating the agent of claim 14 from the culture medium.